

Title: Supplementary Dataset 1:

Description: This file contains data to plot graphs in figure 1.

Title: Supplementary Dataset 2:

Description: This file contains data to plot graphs in figure 2.

Title: Supplementary Dataset 3:

Description: This file contains data to plot graphs in figure 4.

Title: Supplementary Dataset 4:

Description: This file contains data to plot graphs in figure 5.

Title: Supplementary Movie 1.

Description: AMF assisted self-healing of magnetoresistive paste with a micrometer-scaled crack.

Title: Supplementary Movie 2.

Description: AMF assisted self-healing of magnetoresistive sensor connected into a circuit.

Title: Supplementary Movie 3.

Description: AMF assisted self-healing of magnetoresistive sensor with a millimeter-scaled gap submerged into deionized water.

Title: Supplementary Movie 4.

Description: Dynamics of 27 magnetic particles in 1 kHz magnetic field.

Title: Supplementary Movie 5.

Description: Interaction of magnetic microparticles in paste under AMF.

Title: Supplementary Movie 6.

Description: Printed magnetoresistive sensor for safety application.

Title: Supplementary Movie 7.

Description: Printed magnetoresistive sensor for human- machine interface in augmented reality.

Title: Supplementary Movie 8.

Description: Different responsive speeds.